

SEQUENCE LISTING

```
<110> McCarthy, Jeanette
<120> DIAGNOSIS AND TREATMENT OF VASCULAR DISEASE
<130> MMI-007
<150> 60/327,487
<151> 2001-10-09
<160> 4
<170> PatentIn Ver. 2.0
<210> 1
<211> 12850
<212> DNA
<213> Homo sapiens
<400> 1
cccggcactt ctcagtgagg ctctgtggct cacctaaqaa accagcctcc cttgcaggca 60
acgectaget ggcctggtct ggaggetete tteaaatatt tacatecaca eccaagatae 120
ggtcttgaga tttgactcgc atgattgcta tgggacaagt tttcatctgc agtttaaatc 180
tgtttcccaa cttacattag gggtttggaa ttctagatcg tatttgaagt gttggtgcca 240
cacacacctt aacacctgca cgctggcaac aaaaccgtcc gctctgcagc acagctgggg 300
teacetgace ttteteetgt ecceeceact tgageteagt ggetgggeag eaggggatge 360
atggccactg gcggccaggt gcagctctca gctggggtgt tcagaggacg cctgtgtcct 420
cccctcccc atccctctgt cacccttgga ggcagagaac tttgcccgtc agtcccatgg 480
ggaatgtcaa caggcagggg cagcactgca gagatttcat catggtctcc caggccctca 540
ggeteetetg cettetgett gggetteagg getgeetgge tgeaggtgeg teeggggagg 600
ttttctccat aaacttggtg gaagggcagt gggcaaatcc aggagccagc ccgggcttcc 660
caaaccccgc ccttgctccg gacaccccca tccaccagga gggttttctg gcggctcctg 720
ttcaatttct ttccttctag aaaccagcat ccaggcacag gaggggaggc ccttcttggt 780
agcccaggct ttggcgggat tattttcaa agaactttag gagtgggtgg tgctttcctg 840
gcccccatgg ccctgcctgt gaggtcggac aagcgcaggg agtctggggc ctctcagagt 900
gcaggaagtg cgcacagggt gctcccaggc tggggagcac aggtagggga cggtgcgtgg 960
gggatggcgc ctggggcatg ggggatgggg tgtgggaaac ggcatgtggg gcgtagggga 1020
tggggtgtgg aggatcgggg gtggggatgg cgtgtggggt gtgggggatg ggccgtgggg 1080
gggtggggcc tgggaaacag catgtggggc atggggtgtg ggggtgaggt gtgggaaagt 1140
gtgtggggtg tgggggatgg ggcatggaaa gggcgtgtgg ggtgcagggg atggggcatg 1200
gaggtgtggg ggatggggtg tgtggggtgt cggggatggg gcatgtgggg tgtgggggat 1260
ggggcatgga aaggcgtgtg gggtgcagag gatggggcat ggaggtctgg ggcatggggt 1320
gtgtggggtg tcggggatgg ggcatggaaa gggtgtgtgg ggtgtgggga tagggtcagg 1380
ggatggcgtg gggggtgtgg catggggatg gcacgtgtgg catggggatg gggatggggg 1440
gtggggcatg gccgagtggg gctggggctg ggaatggtga gtggggcatg gggatggcga 1500
gtagggggtg tggcgtgagg atggctagtg gggcgtgggg atggcgtgtg gggatggcga 1560
gtgggggtg ggctgtgagg gacagtgcct gggatgtggc tgcagcccta gctcacagca 1620
tggccttatg accccggcca ccttcctgcc caggcggggt cgctaaggcc tcaggaggag 1680
aaacacggga catgccgtgg aagccggggc ctcacagagg tgagcaggga ctqccactgg 1740
ttttgtcctg gggcccagtg ggggcaacat cacctccttc ccctcccatg gcaaagagcc 1800
agcccgcggg gtggctactg cagtgccccc caaggagggt gttccctqct cqaqaqqaaq 1860
tgaccgctcc agcttggcct tccctgggac tggggtgcag gcgattttat cttctttgct 1920
ccattctgtt ccttccagat aatcgtgtgt tcttcatcag gttttcctca gttcttgaga 1980
gettttetga tgeaaatetg ettteaecee agggeggtea eeggetetge teaeaecage 2040
ctccaagggt gtgggtgtcc cgggagtgtg ggtgtcccgg gggcgtgggt gtcccgggag 2100
tgtgggtgtc ccgggggcgt gggtgtcccg ggagtgtggg tgtcccgggg gcgtgggtgt 2160
cccgggagtg tgggtgtccc gggggagtgg gtgtcccggg agtgtgggtg tcccaggggc 2220
gtgggtgtcc cgggagtgtg ggtgtcccgg gggcgtgggt gtcccgggag tgtgggtgtc 2280
ccggaggcga gggtgtcccg ggagtgtggg tgtcccgggg gcgtgggtgt cccgggagtg 2340
tgggtgtccc gggggagtgg gtgtcccggg agtgtgggtg tcccaggggc gtgggtgtcc 2400
```



cgggagtgtg ggtgtcccgg gggcgtgggt gtcccgggag tgtggggtgtc ccggagcgag 2460 ggtgtcccgg gagtgtgggt gtcccggggg cgtgggtgtc ccggaggcga gggtgtccca 2520 ggagtgtggg tgtcccgggg gcgtgggtgt cccgggagtg tgggtgtccc ggaggcgagg 2580 gtgtcccggg agtgtgggtg tcccgggggc gtgggtgtcc cggaggcgag ggtgtcccag 2640 gagtgtgggt gtcccggggg cgtgggtgtc ccgggagtgt gggtgttcca gaggcgaggg 2700 tatcccagaa gtgtgagtgt cccgggggtg tgggtgtccc gggggcgtgg gtgtcccggg 2760 agtgtgggtg tcccgggggc gtgggtatcc cagaagtgtg agtgtcccag gggcgtgggt 2820 gtccgggggc gtgggtgtcc cgggggtgtg ggtgtcccgg gggtcgtggg tgtcccggga 2880 gcgtgggtgt cggggactgc agggacatgg gcctcccctc ccactcctgc cgcccagggc 2940 acctcctgtg aggactcgga gtccgtgagt tcccacctcc ttgagcccga ttctttggtg 3000 teccegeetg cateeteage etectteeaa accagaceag ttetetaggg gegtegaegt 3060 gtgaaactga ttttaaagaa aacaggeggt ggeetttete teggeeecae gtggeecagt 3120 agegeteace tteegteet tetteegege teagtaacea atttaggeeg eteetgeaga 3180 actogggete etgeceaceg geceacageg tecacetgag geetetteet eccageaaag 3240 gtegteeete eggaaegege eteetgegge eteteeagag eeeeteeege gegteetete 3300 ageccegete geeteeteee ggggeeteee teteeegeet geecceagge eegteteeet 3360 egegggetga ggeaggtteg geageaegge geeeggggeg ggggteaete tecaecaeeg 3420 cgtggtgccc acagetcacg gcgctcccgg gtgacggtcc cctcggctgt agggcgtcct 3480 gaagagegge etgeteggag etgagegeae ggggttgeet geecetggge gtetetggee 3540 ctcaccagcc ccgtcttccc atgggcaaaa cggcggtcct gtttgtccac aagtaaccgt 3600 eggggttaeg gaggggeeag gagetgegge ggggggetgt geteteagga eeggeeeag 3660 gaggateege gegaggtetg gageteteag gggtegeggg ggaeagaggg geeceaageg 3720 gaggcgggaa ggcggcagaa gcccaggacc gccaagaget ggcgaggaag cccggggctc 3780 gctgtcgggg gagccgggca ggggccgcgc ctcggcacca ggacgcgagg cctgggaagg 3840 cggatctggc cgcgagcacg cggtgcgggt ggagacgcag ggatttggat ttccgcgggc 3900 gctgcacgga tttccacgcg cggttcacgt gggccccagg gggtgcccgg cacccggggc 3960 cgcgccgcct tctcctgccc ggcatcgacc cgcagcctca cgtttaccgc ggcgcccgca 4020 gcccccttcg cccgcttccg cgcgtgcccc cgagcgcgcc ctcgggatca gcccccggaa 4080 gcagagaggc caggccggga aggatgggcg aacggggtgg ctgacccggg agcacggcag 4140 ggaggacacc cagccaggcc cgcgagcagc gccgctcccc tcctccagga cgggcgggaa 4200 cetgegatge eccegeegeg tgggeegtgg ggeggtetee gaggeactgg geggggeacg 4260 cggtgggcgc ttcacggaac tcgcatttcc cagtcttcgt aacccaggag gaagcccacg 4320 gegteetgea eeggegeegg egegeeaaeg egtteetgga ggagetgegg eegggeteee 4380 tggagaggga gtgcaaggag gagcagtgct ccttcgagga ggcccgggag atcttcaagg 4440 acgcggagag gacggtgage ccagcetegg ggcgeeeege geggaeaetg caeggeggeg 4500 gtgaaccagg ccgcgtgggg ccgcctgcgt ctctttggct gcggcctgtg ggcggcgaac 4560 acgcagcggc gcccgcgcgc gcgctctctc tgcgggggtc gctttccgcc cggggtgact 4620 cegettteet gggegatgee eccaececa ggeacgeget etceeegtge ggeegeaceg 4680 cgcatgccgg ttttcacatc agaaaatacg atttgcacaa gcacacttag ggtgtccccc 4740 ttaacttccc aagggagtcc ccccagtccc cgaagtccag ggcagcctgc gcatcgcaga 4800 cgcgcgcgcc tcgcagaagg gacgtggtga gaagctggcc cacagcatgc caccagcggc 4860 acctecteag ggeaegtgte ggggagaaac aacaettagg gaccetggga etttetedag 4920 ctcacgctca cgggtccacc tcacactacc aagatcacct caatagacgg acactcacac 4980 agggcacact teacacteae aggteaecte acacteaeag gacaceteae acteaeaggg 5040 cacacttcac actcacgggt cacctcacac tccaagatca cctaaagagg acacctcaca 5100 cagggcacac ttcacactca caggtcacac ctcacacaga tcatctcatt ctcacaggac 5160 acctccctct cacaggtcac ctcacactca caggacacct cacagaggtc acctcacacc 5220 cacaggacac ctcacagagg tcacctcaca cggggcacac ttcacactca ggtcacctca 5280 cacccacagg acacctcaca gaggtcacct cacacccaca ggacaactca cagaggtcac 5340 ctcacacagg acacctcaca aaggtcacct cacacccaca ggacacctca cactcatagg 5400 cacctcagtc ttacaggaca actcacactc acaggtcacc tatctcacag gacacctcac 5460 actcacaggt caccttactc tcacaggaca cctcacacag ggcacacttc actccacagg 5520 teaceatace teacacagat caceteatac teacagatea etteatteat teteacagga 5580 tacctcacac tcagggcaca cttcacactc acaggtcaca cctcacacag atcatctcat 5640 tetcacagga cacetecete teacaggtea cettacaete atetcacaet cacaggtege 5700 cacacctcac actcacagga tgcctcacac tcacagaacc acatctcata tgcacaagac 5760 aceteacaet eaggacaeet catgeteaaa gaageeteae aeteacagga ggteeagetg 5820 tetgaggeaa aggetaaeat gaceetttee agacaaattg aggatggtea tgeetageat 5880 ttttatacac ctagttttga aagcatttct catctgttgt attctcacag caccccgtga 5940 gtttaagttc aggtggccaa cagtttcttc agcaatcact tttttctgtg gagtgctttt 6000 getgtttgtg gaatattttg catetgetae tgeaccetet eecegtatgt gtggeeacce 6060

tgtcagaggt ggagctgtgg ctcagagcct gtgtacctcg tcccaggtcc acagctcagc 6120 gacagaagag tcagggttga acctcgggtg ttctgacttg ggagcaggaa atgtgtggtc 6180 acccatagtt ccagatgtcc tggggagggg ccaagattag aagaaaccta cctcagctcc 6240 agaggaaagt ctggcttcct gagcccaccc cgccagaccc aggtccaagt cccccaaccc 6300 cagttcatgg tgtgtccagt gcttaccgtt gggtgctctg gtgaaggtgc atctcacgag 6360 gcttgctctc ttgttccttc agaagctgtt ctggatttct tacagtggtg agtggatgat 6420 caccaccagt cetgeetgea accettetea gettactgae accageceae tecacagatg 6480 gggaccagtg tgcctcaagt ccatgccaga atgggggctc ctgcaaggac cagctccagt 6540 cetatatetg ettetgeete eetgeetteg agggeeggaa etgtgagaeg egtaaggeee 6600 cactttgggt cccatatttg cagagggccc tggggagctg gtggaggtgg cctggccaac 6660 cgggctgcag ggtgcaacaa cctggtgggg tgtgtaggcc gggcattcag ggctcagccc 6720 agttggaaat tggtctaggt gacctttaaa tcccttccag tctgaggtct ttgacaggga 6780 cccaaggttc tgattatcag actcagtggc ccccttcgcg gtcccggccc tgggcaactt 6840 ctcagccctg gagactggcc cagttgagag tccctgtgtc ccgtgtgccc attccagatc 6900 ccacctaget aggtaccegt ttggtaaact teceettete etaettteea ttacaaaggt 6960 ttgaggggtt tgttttttt tttaaccatc tgaatattaa attaatcaca aagtttaggg 7020 cccccaacct cccttgggtt cagtaattca ctagaaggac acatagaaat ccaaatatcc 7080 actgagtgga tacactcaca ggtaccgttt attacagcaa aggatgcagg cttaagtctg 7140 cagagggace agggacaage ttccccttgt cctctcctgt ggggtcatgt ggacatcctt 7200 aatteteeca gaatgaegtg tgaegagaac gtgggaagta etgeeaaact tggggaacge 7260 tacgagecce gtgtecagag gtttgateag ggeteaatga catagaecca getgaecagg 7320 cacgcatggc tgacctcagt ctcagcccct ccagagctac gccgataatg cggccaaggc 7380 cccaccatac atcacattgt cagctagacc atccagcatg gctcaaggcc caggtaaaca 7440 ccaacattcc ctcaggcaag accttccaag ggcttagcgg tcatttccca ggagccaagg 7500 caaaggctac cetteetetg geacageagt teateettga ceacecaaga ceacattett 7560 acactgaatg agctctcctg tgcagcagcc attttcttct ctaagcagaa gagagcccag 7620 caagetggag gaggetgaag agagaggett cetgetggte atetgggtee agaatgeetg 7680 gagatetetg etcagecetg gtgeecagea geeetggtgt geateetgea gggeageett 7740 cccgccggag tcctggactt gctcagggcc actccccttg cccatgtcaa ccaaagtcag 7800 gctgccggtt ctgcttcttc tgtctgagcc catgaccagt gctgggacta actgtccccc 7860 aggegggete aeggtggtae gaggeeaget tggagaaetg teteagetet etggteetet 7920 cgtcagttgg gtctctgatt ggaaagtccc ttggacactt taccatcccc attggacttt 7980 cactttcccc caggetccca teagetgete ggaagagtgg teaceetgga ggeeactgee 8040 caccagecag geacececca aatgeaaceg cagecageae tgecagecac tggcaagget 8100 gttcagacat gtggctcctc tgatccacgc cttgtccttt ggatcagtcc acggagcagt 8160 gtgccaaget caggetetgt cacecacage teatgecace ttecaggeag aacaccactg 8220 ctgacccagg ggcatggcca ccccgggggc tggcgtctcg ctgaccccca gaagcccctc 8280 tcagggtgtc cccttcctgt ccccagacaa ggatgaccag ctgatctgtg tgaacgagaa 8340 eggeggetgt gageagtact geagtgacea caegggeace aagegeteet gteggtgeea 8400 cgaggggtac tetetgetgg cagaeggggt gteetgeaca eccaeaggtg accaggette 8460 atgtcccagt cccagatgac accagtccct gtcccactag gattatctta ctggacaaaa 8520 gacgggtggg actggccttc acatctactg agcactaact atgcactgac caattgtgag 8580 gtgggatctg ggcaccaagg gtggcacagg ccagcagcga ccagtgacta ggatgggcac 8640 cctgggggca atccctgaat ggcctcaggc ccctqccaa cttctaggca gaccagggga 8700 gccaagcaag gcactatoto acgtocaact gcccactogo aggaatooto cgccaqqqtt 8760 catgaatcta cttcggcaca gccaatgtct gtactgactg ctgcccactc tgcattccaa 8820 aactegtaaa ggeteetggg aaaatgggat gttteteeaa aceageetgg aaegaatggg 8880 ctgcacttcc aaaagcaggg acaccccaca cccactgtct ctaaagaggc ggaacgtgcc 8940 caccetggce acacageetg ggaetcagee tgecacetee tegggettee tttetqqcce 9000 aagaccttga ttgaagcaga tcaaaactaa gcatgggatc aaaacaacac agtttgattc 9060 atctttaggt agaatttcat tcaccttcta ctaaagtcaa acaacacatc ttctccctqa 9120 aaagtgagca gagggcggtt ttaagacgta agccctctqt ttcctccaaa accagccctg 9180 accattgtct cctcagccag ccacttcttc aagggcctct catggccggg ccccaccagt 9240 caggeccage egaggecetg cettecacea eccetgggee etgggagete etgeteetgg 9300 gggcctccca tagcctcggc ctcaaggcct ctcagaggat gggtgtttct gaatctttcc 9360 tagtggcacg ttcatccctc acaaatctct gcatctttct gacttttgtt ttacacagtt 9420 gaatatccat gtggaaaaat acctattcta qaaaaaaqaa atqccagcaa accccaaqqc 9480 cgaattgtgg ggggcaaggt gtgccccaaa ggggagtgtc catggcaggt aaggcttccc 9540 ctggcttcag gattccaagc cctgagggtc ttgaagcctt ttgaatgtga acaacagctc 9600 tggaagggaa aatgggcagg tcagcccaag cccacaggct ccaagtcagc acacctagca 9660 cetecagete geggeacece catgetttta gtggggeaag gaaggagaaa agaaaacgae 9720

actcactgag ggtctaccct gtgcagagaa ccctgcgaga tgccccatcc gagttgtcac 9780 gtcgtcctca cggttactct ttgaggtggg atctttgcct gatctttgca aaatcaggag 9840 cattggatca aagctatgtg aagatcctgt gaggtgaaca gtgaaatctc acagcgacat 9900 ttgtattctt gggccgtgcc caagagcacg tctcggctag agaggggcac agcctcccag 9960 agccaggtct gagcagcttt gcctgggagg gatctgcaaa gaccccagga tttcagaaag 10020 aaattgtgca atgccagagg ttccttggca tgcccgggag ggcgagtcat cagagaaaca 10080 atgacagcaa tgtgacttcc acacctcctg tccccccgcc caggtcctgt tgttggtgaa 10140 tggageteag ttgtgtgggg ggaceetgat caacaceate tgggtggtet eegeggeeea 10200 ctgtttcgac aaaatcaaga actggaggaa cctgatcgcg gtgctgggtg ggtaccactc 10260 teccetytee gacegeggty etgggtgggt gecaetette cetyteegae egeggtgety 10320 ggtgggtgcc actctcccct gtccgaccgc ggtgctgggt gggtgccact ctcccctgtc 10380 egacegeggt getgggtggg tgeeactete egetgteega eegeggtget gqqtgggtae 10440 cacteteece tgtetgaeeg eageteteaa gtgteteagg ggetgtgget etgggetteg 10500 tgctgtcact tccacagaca gacagacatc cccaaaaggg gagcaaccat gctgggcacg 10560 actgcctgtg gcaccgtgct ctcagccact ttcccatgcc caaataaaac gataaaagac 10620 tgggggcttc tgcccatcct gcctcacttg accaagagcc cagaagagga tgcgacaccc 10680 agggcetcat gggaceaceg getggeaggg gttetgetca etgggtttat gggtgagaeg 10740 agcactccca ggagggccac tgggccggga agaactgtgg agaatcgggg cacgcctgt 10800 cctcccagct gccagggcac agcatecett ecccacetge aacacecaga ecccagatte 10860 accccagtte acttgteece acacgageea caggetgeea ectggggeag getggeecae 10920 cttggggtta gatgcaggtc cccttgcccc agaaggagac tgcagcccct gcagacctag 10980 aaatggccac agcccatccc catgcaccag ggggtgaggt ggcaggtggt ggaaagggcc 11040 tgaggggggc ttcttccttc caggcgagca cgacctcagc gagcacgacg gggatgagca 11100 gagccggcgg gtggcgcagg tcatcatccc cagcacgtac gtcccgggca ccaccaacca 11160 cgacatcgcg ctgctccgcc tgcaccagcc cgtggtcctc actgaccatg tggtgcccct 11220 ctgcctgccc gaacggacgt tctctgagag gacgctggcc ttcgtgcgct tctcattggt 11280 cagcggctgg ggccagctgc tggaccgtgg cgccacggcc ctggagctca tggtcctcaa 11340 cgtgcccgg ctgatgaccc aggactgcct gcagcagtca cggaaggtgg gagactcccc 11400 aaatatcacg gagtacatgt tctgtgccgg ctactcggat ggcagcaagg actcctgcaa 11460 gggggacagt ggaggcccac atgccaccca ctaccggggc acgtggtacc tgacgggcat 11520 cgtcagctgg ggccagggct gcgcaaccgt gggccacttt ggggtgtaca ccagggtctc 11580 ccagtacatc gagtggctgc aaaagctcat gcgctcagag ccacgcccag gagtcctcct 11640 gcgagcccca tttccctagc ccagcagccc tggcctgtgg agagaaagcc aaggctgcgt 11700 cgaactgtcc tggcaccaaa tcccatatat tcttctgcag ttaatggggt agaggagggc 11760 atgggaggga gggagggtg gggagggaga cagagacaga aacagagaga gacagagaca 11820 gagagagact gagggagaga ctctgaggac atggagagag actcaaagag actccaagat 11880 tcaaagagac taatagagac acagagatgg aatagaaaag atgagaggca gaggcagaca 11940 ggcgctggac agaggggcag gggagtgcca aggttgtcct ggaggcagac agcccagctg 12000 agectectta cetecettea gecaageece acetgeacgt gatetgetgg ceeteagget 12060 gctgctctgc cttcattgct ggagacagta gaggcatgaa cacacatgga tgcacacaca 12120 cacacgccaa tgcacacaca cagagatatg cacacacag gatgcacaca cagatggtca 12180 cacagagata cgcaaacaca ccgatgcaca cgcacataga gatatgcaca cacagatgca 12240 cacacagata tacacatgga tgcacgcaca tgccaatgca cgcacacatc agtgcacacg 12300 gatgcacaga gatatgcaca caccgàtgtg cqcacacaca gatatgcaca cacatggatg 12360 agcacacaca caccaagtgc gcacacacac cgatgtacac acacagatgc acacacagat 12420 gcacacacac cgatgctgac tocatgtgtg ctgtcctctg aaggcggttg tttagctctc 12480 acttttctgg ttcttatcca ttatcatctt cacttcagac aattcagaag catcaccatg 12540 catggtggcg aatgcccca aactctcccc caaatgtatt tctcccttcg ctgggtgccg 12600 ggctgcacag actattcccc acctgcttcc cagcttcaca ataaacggct gcgtctcctc 12660 cgcacacctg tggtgcctgc cacccactgg gttgcccatg attcatttt ggagcccccg 12720 gtgctcatcc tctgagatgc tcttttcttt cacaattttc aacatcactg aaatgaaccc 12780 tcacatggaa gctatttttt aaaaacaaaa gctgtttgat agatgtttga ggctgtagct 12840 cccaggatcc 12850

<210> 2

<211> 466

<212> PRT

<213> Homo sapiens

<400> 2

Met Val Ser Gln Ala Leu Arg Leu Leu Cys Leu Leu Gly Leu Gln

1 5 10 15 Gly Cys Leu Ala Ala Gly Gly Val Ala Lys Ala Ser Gly Gly Glu Thr Arg Asp Met Pro Trp Lys Pro Gly Pro His Arg Val Phe Val Thr Gln Glu Glu Ala His Gly Val Leu His Arg Arg Arg Arg Ala Asn Ala Phe Leu Glu Glu Leu Arg Pro Gly Ser Leu Glu Arg Glu Cys Lys Glu Glu Gln Cys Ser Phe Glu Glu Ala Arg Glu Ile Phe Lys Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln Leu Gln Ser Tyr 115 Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn Cys Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly Gly Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys Arg Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg Asn Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro Lys Gly Glu Cys Pro Trp Gln Val Leu Leu Val Asn Gly Ala Gln Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala His Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu Gly Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg Val Ala Gln Val 280 Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn His Asp Ile Ala 290 295 Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp His Val Val Pro 310 315 Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr Leu Ala Phe Val 325

31

<400> 4

ctcctgtcgg tgccatgagg ggtactctct g

Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu Asp Arg Gly Ala 345 Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg Leu Met Thr Gln 360 Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser Pro Asn Ile Thr 375 Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser Lys Asp Ser Cys 385 390 Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys Ala Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile Glu Trp Leu Gln Lys Leu Met Arg Ser Glu Pro Arg Pro Gly Val Leu Leu Arg Ala Pro Phe Pro 465 <210> 3 <211> 31 <212> DNA <213> Homo sapiens <400> 3 gctgcaggtg cgtccaggga ggttttctcc a 31 <210> 4 <211> 31 <212> DNA <213> Homo sapiens